

#23



1600

ENTERED

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/471,669A

DATE: 12/23/2002 P-6
 TIME: 12:15:54

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 Output Set: N:\CRF4\12232002\I471669A.raw

3 <110> APPLICANT: Anderson, John P.
 4 Basi, Guriqbal
 5 Doane, Minh Tam
 6 Frigon, Normand
 7 John, Varghese
 8 Power, Michael
 9 Sinha, Sukanto
 10 Tatsuno, Gwen
 11 Tung, Jay
 12 Wang, Shuwen
 13 McConlogue, Lisa
 14 Elan Pharmaceuticals, Inc.
 16 <120> TITLE OF INVENTION: BETA-SECRETASE ENZYME COMPOSITIONS AND METHODS
 18 <130> FILE REFERENCE: 015270-006430US
 20 <140> CURRENT APPLICATION NUMBER: US 09/471,669A
 21 <141> CURRENT FILING DATE: 1999-12-24
 23 <150> PRIOR APPLICATION NUMBER: US 60/114,408
 24 <151> PRIOR FILING DATE: 1998-12-31
 26 <150> PRIOR APPLICATION NUMBER: US 60/119,571
 27 <151> PRIOR FILING DATE: 1999-02-10
 29 <150> PRIOR APPLICATION NUMBER: US 60/139,172
 30 <151> PRIOR FILING DATE: 1999-06-15
 32 <160> NUMBER OF SEQ ID NOS: 108
 34 <170> SOFTWARE: PatentIn Ver. 2.1
 36 <210> SEQ ID NO: 1
 37 <211> LENGTH: 1503
 38 <212> TYPE: DNA
 39 <213> ORGANISM: Homo sapiens
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 44 ctgcggctgc cccgggagac cgacgaagag cccgaggagc cggccggag gggcagctt 180
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56 tacaactatg acaagagcat tggacagt ggcaccacca accttcgttt gcccaagaaa 900
 57 gtgttgaag ctgcagtcaa atccatcaag gcagcctcct ccacggagaa gttccctgat 960
 58 ggtttctggc taggagagca gctgggtgtgc tggcaagcag gcaccacccc ttgaaacatt 1020
 59 ttcccagtca tctcaactcta cctaattgggt gaggttacca accagtccctt ccgcacatcacc 1080
 60 atccttcgcg agcaataacct gcggccagtg gaagatgtgg ccacgtccca agacgactgt 1140
 61 tacaagtggc ccatctcaca gtcatccacg ggcactgtta tggagactgt tatcatggag 1200
 62 ggcttctacg ttgtcttga tcgggcccga aaacgaattt gctttgctgt cagcgcgttgc 1260
 63 catgtgcacg atgagttcag gacggcagcg gtggaaaggcc ctttgtcac cttggacatg 1320
 64 gaagactgtg gctacaacat tccacagaca gatgagtcaa ccctcatgac catagcctat 1380
 65 gtcatggctg ccatctgcgc cctcttcatg ctgccactct gcctcatgtt gtgtcagtgg 1440
 66 cgctgcctcc gctgcctgcg ccagcagcat gatgactttt ctgatgacat ctccctgctg 1500
 67 aag 1503
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 71 <211> LENGTH: 501
 72 <212> TYPE: PRT
 73 <213> ORGANISM: Homo sapiens
 75 <400> SEQUENCE: 2
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 77 1 5 10 15
 79 Leu Pro Ala His Gly Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser
 80 20 25 30
 82 Gly Leu Gly Gly Ala Pro Leu Gly Leu Arg Leu Pro Arg Glu Thr Asp
 83 35 40 45
 85 Glu Glu Pro Glu Glu Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val
 86 50 55 60
 88 Asp Asn Leu Arg Gly Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr
 89 65 70 75 80
 91 Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser
 92 85 90 95
 94 Ser Asn Phe Ala Val Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr
 95 100 105 110
 97 Tyr Gln Arg Gln Leu Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val
 98 115 120 125
 100 Tyr Val Pro Tyr Thr Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp
 101 130 135 140
 103 Leu Val Ser Ile Pro His Gly Pro Asn Val Thr Val Arg Ala Asn Ile
 104 145 150 155 160
 106 Ala Ala Ile Thr Glu Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn Trp
 107 165 170 175
 109 Glu Gly Ile Leu Gly Leu Ala Tyr Ala Glu Ile Ala Arg Pro Asp Asp
 110 180 185 190
 112 Ser Leu Glu Pro Phe Phe Asp Ser Leu Val Lys Gln Thr His Val Pro
 113 195 200 205
 115 Asn Leu Phe Ser Leu Gln Leu Cys Gly Ala Gly Phe Pro Leu Asn Gln
 116 210 215 220
 118 Ser Glu Val Leu Ala Ser Val Gly Gly Ser Met Ile Ile Gly Gly Ile
 119 225 230 235 240
 121 Asp His Ser Leu Tyr Thr Gly Ser Leu Trp Tyr Thr Pro Ile Arg Arg
 122 245 250 255

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Input Set : A:\Sub15270-006430US.app
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124 Glu Trp Tyr Tyr Glu Val Ile Ile Val Arg Val Glu Ile Asn Gly Gln
125 260 265 270
127 Asp Leu Lys Met Asp Cys Lys Glu Tyr Asn Tyr Asp Lys Ser Ile Val
128 275 280 285
130 Asp Ser Gly Thr Thr Asn Leu Arg Leu Pro Lys Lys Val Phe Glu Ala
131 290 295 300
133 Ala Val Lys Ser Ile Lys Ala Ala Ser Ser Thr Glu Lys Phe Pro Asp
134 305 310 315 320
136 Gly Phe Trp Leu Gly Glu Gln Leu Val Cys Trp Gln Ala Gly Thr Thr
137 325 330 335
139 Pro Trp Asn Ile Phe Pro Val Ile Ser Leu Tyr Leu Met Gly Glu Val
140 340 345 350
142 Thr Asn Gln Ser Phe Arg Ile Thr Ile Leu Pro Gln Gln Tyr Leu Arg
143 355 360 365
145 Pro Val Glu Asp Val Ala Thr Ser Gln Asp Asp Cys Tyr Lys Phe Ala
146 370 375 380
148 Ile Ser Gln Ser Ser Thr Gly Thr Val Met Gly Ala Val Ile Met Glu
149 385 390 395 400
151 Gly Phe Tyr Val Val Phe Asp Arg Ala Arg Lys Arg Ile Gly Phe Ala
152 405 410 415
154 Val Ser Ala Cys His Val His Asp Glu Phe Arg Thr Ala Ala Val Glu
155 420 425 430
157 Gly Pro Phe Val Thr Leu Asp Met Glu Asp Cys Gly Tyr Asn Ile Pro
158 435 440 445
160 Gln Thr Asp Glu Ser Thr Leu Met Thr Ile Ala Tyr Val Met Ala Ala
161 450 455 460
163 Ile Cys Ala Leu Phe Met Leu Pro Leu Cys Leu Met Val Cys Gln Trp
164 465 470 475 480
166 Arg Cys Leu Arg Cys Leu Arg Gln Gln His Asp Asp Phe Ala Asp Asp
167 485 490 495
169 Ile Ser Leu Leu Lys
170 500
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174 <211> LENGTH: 24
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176 <213> ORGANISM: Homo sapiens
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184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
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189 oligonucleotide primer derived from SEQ ID NO:2
191 <400> SEQUENCE: 4
192 gagagacgar garccwgaag agcc 24
195 <210> SEQ ID NO: 5
196 <211> LENGTH: 24

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Input Set : A:\Sub15270-006430US.app
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197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
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204 <400> SEQUENCE: 5 24
205 gagagacgar garccwgaag aacc
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210 <212> TYPE: DNA
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215 oligonucleotide primer derived from SEQ ID NO:2
217 <400> SEQUENCE: 6 24
218 gagagacgar garccwgagg aacc
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222 <211> LENGTH: 23
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
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227 <223> OTHER INFORMATION: Description of Artificial Sequence: Degenerate
228 oligonucleotide primer derived from SEQ ID NO:2
230 <400> SEQUENCE: 7 23
231 agagacgarg arccsgagga gcc
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243 <400> SEQUENCE: 8 23
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247 <210> SEQ ID NO: 9
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253 <223> OTHER INFORMATION: Description of Artificial Sequence: Degenerate
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263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: Description of Artificial Sequence: Degenerate

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Input Set : A:\Sub15270-006430US.app
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270 agagacgarg arccsgagga acc 23
273 <210> SEQ ID NO: 11
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275 <212> TYPE: DNA
276 <213> ORGANISM: Artificial Sequence
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280 oligonucleotide primer derived from SEQ ID NO:2
282 <400> SEQUENCE: 11 23
283 cgtcacagrt trtcaaccat ctc
286 <210> SEQ ID NO: 12
287 <211> LENGTH: 23
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289 <213> ORGANISM: Artificial Sequence
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299 <210> SEQ ID NO: 13
300 <211> LENGTH: 23
301 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequence
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305 <223> OTHER INFORMATION: Description of Artificial Sequence: Degenerate
306 oligonucleotide primer derived from SEQ ID NO:2
308 <400> SEQUENCE: 13 23
309 cgtcacagrt trtccaccat ctc
312 <210> SEQ ID NO: 14
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315 <213> ORGANISM: Artificial Sequence
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321 <400> SEQUENCE: 14 23
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325 <210> SEQ ID NO: 15
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327 <212> TYPE: DNA
328 <213> ORGANISM: Artificial Sequence
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334 <400> SEQUENCE: 15 23
335 cgtcacagrt trtcaaccat ttc
338 <210> SEQ ID NO: 16

RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : A:\Sub15270-006430US.app
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:22; N Pos. 12
Seq#:23; N Pos. 12
Seq#:24; N Pos. 12
Seq#:25; N Pos. 12
Seq#:26; N Pos. 7
Seq#:27; N Pos. 7
Seq#:28; N Pos. 3,12
Seq#:29; N Pos. 3,12
Seq#:34; N Pos. 16
Seq#:35; N Pos. 16
Seq#:36; N Pos. 16
Seq#:37; N Pos. 16
Seq#:48; N Pos. 6164,6238,6254,6255,6256,6257,6258,6259,6260,6261,6262,6263
Seq#:48; N Pos. 6264,6265,6266,6267,6268,6269,6270,6271,6272
Seq#:61; Xaa Pos. 4
Seq#:72; Xaa Pos. 10
Seq#:73; Xaa Pos. 5
Seq#:76; N Pos. 6,18,27,30,33,36,39,42,48,57
Seq#:78; Xaa Pos. 3
Seq#:81; Xaa Pos. 4

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/471,669A

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Input Set : A:\Sub15270-006430US.app
Output Set: N:\CRF4\12232002\I471669A.raw

L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:449 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:485 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:627 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
L:645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:681 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
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L:1083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:6180
L:1084 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:6240
L:1713 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:2396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
L:2415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0
L:2594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0
L:2626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0
L:2674 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0